

IN THE CLAIMS:

Please amend Claims 1-17 as follows:

1. (Currently Amended) An image forming apparatus comprising:

a detachable first process cartridge configured and positioned to form ~~for forming~~ a first color toner image with a first color toner on a recording medium;

a detachable second process cartridge configured and positioned to form ~~for forming~~ a second color toner image on the recording medium after the formation of the first color toner image on the recording medium;

a first ~~detection~~ detector configured and positioned to detect ~~means for detecting an~~ the amount of toner used by ~~the~~ said first process cartridge during color image formation; and

a determination unit configured to estimate the ~~means for estimating an~~ amount of first color toner mixed into ~~the~~ said second process cartridge based on the amount of toner detected by said first detector ~~the detection means~~ and determining when it is time to replace ~~the~~ said second process cartridge based on the estimated amount of first color toner mixed into ~~the~~ said second process cartridge.

2. (Currently Amended) The image forming apparatus of claim 1, further comprising a second detector configured and positioned to detect the ~~detection means for detecting an~~ amount of toner causing deterioration inside ~~the~~ said second process cartridge,

wherein said ~~the~~ determination unit ~~means~~ determines that it is time to replace ~~the~~ said second process cartridge whenever a defective toner amount exceeds a predetermined value, the defective toner amount being the sum of the amount of first color toner mixed into ~~the~~ said second process

cartridge based and the amount of toner causing deterioration inside the second process cartridge.

3. (Currently Amended) The image forming apparatus according to claim 2, wherein:

~~the~~ said second process cartridge has a memory configured to store ~~for storing~~ one or more parameters relating to the defective toner amount; and

~~the~~ said determination unit ~~means~~ has a memory configured to store ~~means for storing~~ the one or more parameters relating to the defective toner amount stored in the said second process cartridge memory,

wherein ~~the~~ said determination unit ~~means~~ reads out the one or more parameters relating to the defective toner amount from ~~the~~ said second process cartridge memory to obtain the defective toner amount.

4. (Currently Amended) The image forming apparatus according to claim 2, wherein ~~the~~ said second detector configured to detect ~~detection means for detecting~~ the amount of toner causing deterioration inside ~~the~~ said second process cartridge detects the ~~such~~ toner amount causing deterioration inside said second process cartridge based on utilization of ~~the~~ said second process cartridge.

5. (Currently Amended) The image forming apparatus according to claim 2, wherein ~~the~~ said second detector configured to detect ~~detection means for detecting~~ the amount of toner causing deterioration inside ~~the~~ said second process cartridge detects ~~such~~ the toner amount causing deterioration inside said second process cartridge from a the rotation speed and length of time of

rotation of a development roller included in ~~the~~ said second process cartridge.

6. (Currently Amended) The image forming apparatus according to claim 1, wherein ~~the~~ said first detector ~~detection means~~ determines the amount of toner used by ~~the~~ said first process cartridge during color image formation from ~~an~~ the amount of image data in the image formed by ~~the~~ said first process cartridge.

7. (Currently Amended) A control method for controlling an image forming apparatus having a detachable first process cartridge configured and positioned to form ~~for forming~~ a first color toner image with a first color toner on a recording medium and a detachable second process cartridge configured and positioned to form ~~for forming~~ a second color toner image on the recording medium after the formation of the first color toner image on the recording medium, ~~the~~ said control method comprising:

a detection step of detecting ~~an~~ the amount of toner used by the first process cartridge during color image formation; and

a determining step of estimating ~~an~~ the amount of the first color toner mixed into the second process cartridge based on the amount of toner detected in ~~the~~ said detection step and determining that it is time to replace the second process cartridge based on the estimated amount of the first color toner mixed into the second process cartridge.

8. (Currently Amended) A cartridge that can be detachably attached to a color image forming apparatus that forms an image using a plurality of color toners, ~~the~~ said cartridge comprising:

a toner container configured to hold ~~for holding~~ toner; and

a storage unit configured to store ~~for storing~~ information relating to ~~an~~ the amount of unusual toner included in said toner container.

9. (Currently Amended) The cartridge according to claim 8, wherein the toner container contains toner of a first color, and

the unusual toner includes ~~off-color~~ toner of a color different from the first color ~~in the toner container~~ and/or degraded toner in the toner container.

10. (Currently Amended) The cartridge according to claim 8, wherein the toner container contains toner of a first color, and

the amount of unusual toner is the sum of ~~the~~ an amount of ~~off-color~~ toner of a color different from the first color ~~included in the toner container~~ and an amount of degraded toner included in said toner container.

11. (Currently Amended) The cartridge according to claim 8, wherein ~~the~~ said storage unit further comprises a storage area configured to store ~~for storing~~ a table that correlates a print data amount of ~~said~~ the image forming apparatus and the unusual toner amount included in ~~the~~ said toner container of the image forming apparatus.

12. (Currently Amended) The cartridge according to claim 8, further comprising a developer member configured and positioned to develop ~~for developing~~ the toner in said toner container onto an

image carrier of the image forming apparatus.

13. (Currently Amended) A memory device loaded into a cartridge used in an image forming apparatus that uses a plurality of color toners to form an image, the image forming apparatus including an image carrier, a toner container holding toner, and a developer member configured and positioned to develop ~~for developing~~ the toner in the toner container onto the image carrier, said memory device comprising a storage area configured to store ~~for storing~~ information related to an amount of unusual toner in the toner container.

14. (Currently Amended) The memory device according to claim 13, wherein the toner container contains toner of a first color, and the unusual toner includes ~~off-color~~ toner of a color different from the first color ~~in the toner container~~ and/or degraded toner in the toner container.

15. (Currently Amended) The memory device according to claim 13, wherein the toner container contains toner of a first color, and the unusual toner amount is the sum of ~~the off-color~~ an amount of degraded ~~toner amount~~ in the toner container and ~~an~~ the amount of toner of a color different from the first ~~color of the toner in said toner container~~.

16. (Currently Amended) The memory device according to claim 13, further comprising a storage area configured to store ~~for storing~~ a table that correlates a print data amount of ~~said~~ the image forming apparatus and the unusual toner amount included in the toner container of the image forming apparatus.

17. (Currently Amended) The memory device according to claim 13, wherein the cartridge includes at least ~~said~~ the toner container.